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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,173	10/09/2001	James Clough	10012945-1	8648

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EXAMINER	
CARBONELLO, MICHAEL J	
ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/004,173	CLOUGH ET AL.	
	Examiner	Art Unit	
	Michael J. Carbonello	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1) 6/23/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received 11/21/2005. It has been entered and made of record; claims 1-18 are pending.

Response to Arguments

2. Upon review of the current amendments, and the current art of record, the examiner believes that the references of Takimoto in view of Higley et al as obvious at the time of invention.
3. Regarding claims 1-5, applicant's arguments filed 10/09/2001 have been fully considered but they are not persuasive.
4. In response to applicant's arguments 10/09/2005, regarding claims 1-5, which was previously cited in the office action filed 08/10/2005, as being unpatentable over Takimoto in view if Higley et al. Claims 1-5; "A print server for processing a print job sent by the workstation, the print serving comprising: a printer-set-up module to provide a print driver for installation on the workstation; and an authentication module to supply authenticating code to the workstation and to review the print job sent by the workstation to determine validity of the authentication code attached to the print job"
5. Takimoto uses a server computer as a print server, in column 1, line 4; "a printer is managed by a server computer." The server computer [2] would also function as a printer set up module as figure 1 clearly shows a printer driver [22] as a component of the server computer. While Takimoto does disclose the use of security validating, he does not apply the use of an authentication module for use in authentication users.

Higley et al discloses in column 2, lines 13-19; "Login security can vary greatly from one computer system to the next. One form of login security comprises a login phase and an authentication phase. The login phase typically involves prompting a source (such as a user, a program, a resource, etc.), which is attempting to enter the system for a name and a password. After successfully proving knowledge of the password, the source receives an encrypted private key from a server." As is claimed in the specifications, page 2, lines 10-11. The purpose of this invention is to authenticate users, to avoid erroneous printing problems, which is being accomplished by Takimoto in view of Higley et al. The idea of an authentication protocol for security is not a new idea as Higley et al is making use of an authentication process. As does Takimoto, which uses security-validating section [22b] where he authorizes users. Therefore the combination of Takimoto and Higley et al do combine to create a printing server that authenticates the users.

6. Regarding claims 6-9 and 10-12 and 13-17, applicant's arguments filed 10/09/2001 have been fully considered but they are not persuasive.

7. In response to applicant's arguments 10/09/2005, regarding claims 1-5, which was previously cited in the office action filed 08/10/2005, as being unpatentable over Takimoto in view of Higley et al. Claims 6-9; "attaching a workstation to a LAN, downloading and installing a print driver on a workstation, downloading an authentication code to the workstation, sending a print job, containing the authentication code, from the workstation to a print server, verifying validity of the authentication code and sending the print job from the print server to a printer."

8. Takimoto teaches the use of a LAN, Takimoto also teaches the use of a client computer communicating with a printer sever that is communicating with a printer. Since a print driver is merely software that communicates with a client computer and the printer to allow documents to be outputted, it is assumed that there is a printer driver, which is further supported by the printer driver [41]; further as is disclosed by Takimoto, security information is stored in the file device [43]. The method of authenticating the users is merely an exercise in design choice. In the specification the applicant discloses page 1, lines 18-23, that it is too difficult and time consuming to install the proper drivers for many computer users, but in confident in the user's ability to download a driver from a web interface.

9. If driver installation is too difficult one scenario then it is assumed to be too difficult in all scenarios. The hotel guest still needs to access a website, and still needs to download the authenticating software, and drivers The process does not have fewer less complicated steps than installing from a CD -ROM. In the interest of simplification and repetition it would make sense to NOT want to introduce another method of authentication. Also, if the client (or hotel guest) is using the network provided by the hotel, and sending all document to a print server as is claimed by the applicant, then it would be a very simple process (for a network administrator) to track who printed what and to where, since all request need to go through the print server. The process would be similar to tracking (and charging) phone calls, since the all request are on a network owned and run by the hotel.

10. Regarding claims 13-17, applicant's arguments filed 10/09/2001 have been fully considered but they are not persuasive.

11. In response to applicant's arguments 10/09/2005, regarding claims 1-5, which was previously cited in the office action filed 08/10/2005, as being unpatentable over Takimoto in view of Higley et al. Claims 6-9; "attaching a workstation to a LAN, downloading and installing a print driver on a workstation, downloading an authentication code to the workstation, sending a print job, containing the authentication code, from the workstation to a print server, verifying validity of the authentication code using an authentication module on the print server, and send the print job from the print server to a printer." Further any function or program "call" could be viewed as module on the print server.

12. Takimoto discloses, in figure, a security validating section [22b], which was disclosed above as an authentication method taught by Higley et al. Using the broadest reasonable interpretation, this would be an authentication module on the print server.

13. The examiner believes that the user has not overcome the obviousness of Takimoto in view of Higley et al. The method of downloading software, drivers or other information from a website is certainly not a new idea and has been common practice long before the application for patent. Next, the idea of authenticating users for security reasons or simply to track computer and printer usage. Lastly, since the network being connected to by the client, is owned by the hotel (or business) tracking users can very easily be achieved, either through the wired connection in the room, or via a wireless connection which can be used to further verify the user. The methods and devices

disclosed by the applicant are examples of an exercise in design choice where current components are being substituted by functionally equivalent components.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takimoto in view of Higley et al.
2. Takimoto discloses in figure 4, a server computer [4], a printer driver [41] connected to a network driver [42], which is connected to a network adapter [51] of a printer [5]. Which is connected to another network adapter [12] of a client computer [1]. Takimoto does not disclose, "an authentication module to supply an authentication code to the workstation, and to review the print job sent by the workstation to determine validity of a copy of the authentication code attached to the print job." Higley et al discloses in column 2, lines 13 -19, "One form of login security comprises a login phase and an authentication phase. The login phase typically involves prompting a source (such as a user, a program, a resource, etc.), which is attempting to enter the system for a name and a password. After successfully proving knowledge of the password, the source receives an encrypted private key from a server." Thus, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto with Higley et al to produce a print server that has a print set up module to provide a

print driver and an authentication module to supply authentication code to a workstation.

With respect to claim 1, a client computer is a type of workstation. The benefit of combining Takimoto with Higley et al is that it provides a print server with drivers and authentication to maximize security and ease of use, while minimizing errors that are associated with trying to connect temporarily to a network printer.

3. With respect to claim 2, Takimoto and Higley et al disclose the methods and devices discussed above, particularly in claim 1. Takimoto further discloses in figure 4, a file device [43]. Using the broadest reasonable interpretation the file device [43] could be used to store at least one additional print driver, to be used with a print server. The benefit of storing more than one print driver is to maximize compatibility among a variety of workstations and printers within a network.

4. Regarding claims 3 and 4, Takimoto and Higley et al disclose the methods and devices discussed above, Takimoto further discloses in figure 1, an interface for manager [22c] connected to a security validating section [22b], which is connected to a print request analyzing portion [22a], which is connected to a network driver [21], which is connected to another network driver [12] of the client computer [1]. With respect to claim 3, using the broadest reasonable interpretation, the manager for interface [22c] could be a webpage interface and it could utilize a questionnaire to gather information from the workstation. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a webpage interface that also presents a questionnaire to the user of a workstation to help provide the best possible driver. The motivation is that webpage interface with help

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determine which print driver is required. Also most people are familiar with a webpage style interface due to the commonness and ease of access to the World Wide Web.

5. Regarding claim 5, Takimoto and Higley et al disclose the methods and devices discussed above, and Higley et al further discloses in column 6, lines 38-41; "Before attaching to the specified server, this function tries to get the server's net address from the default server's Bindery. The function returns success or error codes." Using the broadest reasonable interpretation, the server's "net address" is a MAC address because it describes the location of the hardware on a network the same way a MAC address does. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a print server that transfers the MAC from the workstation to the print server. The motivation is that since the MAC address provides location information about the workstation to the print server, it will help maximize security during the authentication process and reduce errors associated with trying to connect workstations.

6. Regarding claim 6, Takimoto and Higley et al disclose the methods and devices discussed above, specifically the methods and devices discussed in claim 1. Takimoto further discloses in column 3, lines 44-67; "With reference to FIG. 1, a client computer 1 is provided with a user application 11 and a network driver 12. A server computer 2 is provided with a network driver 21, a printer driver 22, and a file device 23. The printer driver 22 of the server computer 2 includes a print request analyzing portion 22a, a security validating portion 22b, an interface 22c for a manager.

A document prepared by the user application 11 on the client computer 1 is transferred to the server computer 2 via the network drivers 12 and 21. The printer driver 22 of the server computer 2 analyzes, in the print request analyzing section 22a, a user ID (identifying information).

The security validating portion 22b compares the result of analysis by the print request analyzing portion 22a with the information pertaining to the user, and, if requirements for printing are not satisfied, rejects the print request."

With respect to claim 6, using the broadest reasonable interpretation, the connection of the client computer via the network drivers to both the print server and the printer is method for attaching a workstation on a type of LAN. As was discussed above in claim 1, a method for providing a print driver and authentication to the workstation has already been disclosed. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a method of printing comprising of attaching a workstation to a LAN, installing a print driver on the workstation, downloading an authentication code to the workstation, sending a print job to the print server and verifying validity of the authentication code, and sending print job from the print server to a printer. The motivation is that this method provides a secure means to help set up, install, and run a temporary printing network for a variety of printers while minimizing errors and security issues that are associated with network installations of workstations, print servers and printers.

7. Regarding claim 7, Takimoto and Higley et al disclose the methods and devices discussed above, specifically the methods and devices discussed in claims 2 and 6.

Takimoto disclosed a file device [43], which is connected via the LAN to both the printer and the workstation, as part of the server computer [4]. The network devices [12], [42], [51] could be used to obtain information about the workstation and then select a print driver from the file device [4]. As was disclosed in claim 2, the file device [43] could be used to store more than one print driver. Using the broadest reasonable interpretation of the term "library" a file device that stores multiple print drivers could be viewed as a library. Thus it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a printing method that obtains information about the workstation and utilizes a library for information about the print driver. The benefit of storing a library of print drivers is that it maximizes compatibility between workstations and printers because there are various drivers for each workstation and printer combination in a central accessible location.

8. Regarding claim 8, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claim 5. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a method of printing that transfers the MAC from the workstation to the print server to assist in authentication of the print jobs. The motivation is that since the MAC address provides location information about the workstation to the print server, it will help maximize security during the authentication process, and minimizes mistakes about locations of printers and workstations.

9. Regarding claim 9, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claims 3 and 4. Hence, it would have been obvious at

the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a webpage interface that presents a questionnaire to the user of a workstation to help provide the best possible driver. The motivation is that webpage interface will help determine which printer driver is required for that particular printer workstation combination. Also most people are familiar with a webpage interface as a result of the commonness and ease of access to the World Wide Web.

10. Regarding claim 10, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claims 1 and 6. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a method of authenticating a print job by installing a print driver on the workstation, downloading an authentication code to the workstation, sending a print job to the print server and verifying validity of the authentication code, and sending print job from the print server to a printer. The motivation is that this method provides a secure means to help set up, install, and run a temporary printing network for a variety of printers while minimizing errors and security issues that are associated with network installations of workstations, print servers and printers.

11. Regarding claim 11, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claim 3. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a method to gather information from a workstation to help provide the preferred print driver for that workstation. The motivation is that information gathering

will help determine which printer driver is required to maximize compatibility among the workstation, print server and printer.

12. Regarding claim 12, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claims 5 and 8. Thus, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a method of authenticating a print job utilizes a MAC address to assist in authentication of the print jobs. The motivation is that since the MAC address provides location information about the workstation to the print server, it will help maximize security during the authentication process and minimize mistakes about locations of printers and workstations.

13. Regarding claim 13, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claim 1, 6 and 10. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a processor-readable medium having processor-executable instructions, when executed by a computer that cause the computer install a print driver on the workstation, download an authentication code to the workstation, send a print job to the print server and verifying validity of the authentication code, and send print job from the print server to a printer. With respect to claim 13, using the broadest reasonable interpretation of the phrase "processor-readable medium having processor-executable instructions", the print server [2] is a device that has said features. The motivation is that this method provides a secure means to help set up, install, and run a temporary printing network for a variety of printers while minimizing errors and security

issues that are associated with network installations of workstations, print servers and printers.

14. Regarding claim 14, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claim 3. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a processor-readable media utilizing a method to gather information from a workstation to help indicate the preferred print driver to be sent to that workstation. The motivation is that information gathering will help determine which printer driver is required to maximize compatibility among the workstation, print server and printer.

15. Regarding claim 15, Takimoto and Higley et al disclose the methods and devices discussed above, specifically the methods and devices discussed in claims 7. Thus it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a processor-readable media, which gathers information about the workstation and utilizes a library for information about the print driver. The benefit of storing a library of print drivers is that it maximizes compatibility between workstations and printers because there are various drivers for each workstation and printer combination in a central accessible location.

16. Regarding claim 16, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claims 5 and 8. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a processor-readable media that transfers the MAC from the workstation to the print server to aid in recognizing the location of workstations. The

motivation is that since the MAC address provides location information about the workstation to the print server, it will help maximize security during the authentication process, and minimizes mistakes about locations of printers and workstations.

17. Regarding claim 17, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claims 3 and 4. Therefore, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto and Higley et al to produce a processor-readable media that obtains information about the workstation from the web browser interface. The motivation is that the interface with help decide which printer driver is required based on the gathered information, and ultimately reduce the amount of errors associated with incorrect printer/workstation combinations that can result on network where numerous people will be utilizes the resources for short periods of time.

18. Regarding claim 18, Takimoto and Higley et al disclose the methods and devices discussed above, specifically in claim 1. Thus, it would have been obvious at the time of invention to one of ordinary skill in the art to combine Takimoto with Higley et al to produce an print server which has a printer set up module to provide a print driver and an authentication module to supply an authentication code to a work station. The benefit of combining Takimoto with Higley et al is that it produces a print server with drivers and authentication code to maximize security and ease of use of the network, while minimizing errors associated with trying to connect temporarily to a printer network.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
20. Glasser et al discloses, "A unified and straightforward approach to managing file and other resource security in a networked computing environment is disclosed."
21. Saito discloses, "A plurality of application servers, a client, an integrated authentication server and a security information management server are connected to a network. A user having different combinations of user ID's and passwords or certificates for a plurality of kinds of services processed by the plurality of application servers makes requests for services to the individual application servers through the client by using a common integrated certificate."
22. Perlman discloses, "An authentication method and process are provided."
23. Slaughter et al discloses, "A computer-implemented method for allocating memory resources to a device driver is described. In one embodiment, a device driver generates a request for memory allocation in terms of an abstract memory address space."
24. Mashayekhi discloses, "A distributed authentication service that automates an authentication exchange between a user and an application program of a distributed network system."

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

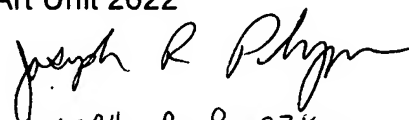
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Carbonello whose telephone number is (571) 272-0625. The examiner can normally be reached on Monday - Friday 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael J Carbonello
Examiner
Art Unit 2622


JOSEPH R. POKRZYWA
PRIMARY EXAMINER
ART UNIT 2622